

FIG. 1A-1

Murine	TREX	1	MTGYTMLRNGG	ENG	QTCMLRWSNRIRL	TWLSFTLFI	ILVFFPLIAHYLT	TLDEADEA
Human	TREX	1	MTGYTMLRNGG	ENG	QTCMLRWSNRIRL	TWLSFTLFI	ILVFFPLIAHYLT	TLDEADEA
Murine	TREX	61	GKRIFGPR	GSE	LCVCEVHVLD	CRIR	ESVSEELLQ	EAKRQELNSE
Human	TREX	61	GKRIFGPR	GSE	LCVCEVHVLD	CRIR	ESVSEELLQ	EAKRQELNSE
Murine	TREX	121	ENAKQD	LLQLKNV	LSQTEHSYKELMAQ	QPKLSL	PIRL	PEKDDAGLPPPK
Human	TREX	121	ENAKQD	LLQLKNV	LSQTEHSYKELMAQ	QPKLSL	PIRL	PEKDDAGLPPPK
Murine	TREX	181	NCFDYSRC	PLTSGF	PVVVYDSQFA	FGSYLDPLVKQAF	QATVRANVVT	TENADACLYV
Human	TREX	181	NCFDYSRC	PLTSGF	PVVVYDSQFA	FGSYLDPLVKQAF	QATVRANVVT	TENADACLYV
Murine	TREX	241	LVGEMQEP	NVLRPA	LEKQL	PSLPHWRTDGHNV	IINLSRKS	DTQNL
Human	TREX	241	LVGEMQEP	NVLRPA	LEKQL	PSLPHWRTDGHNV	IINLSRKS	DTQNL
Murine	TREX	300	STL	KAAQVRA	GFDLVWSPLVHAMSE	FNMEIP	PPQVPV	KRKYLFTFQGEK
Human	TREX	301	STL	KAAQVRA	GFDLVWSPLVHAMSE	FNMEIP	PPQVPV	KRKYLFTFQGEK
Murine	TREX	360	RSF	EEEMEGD	PPADYD	DDRI	IATLKA	VQDSKLQVLVEFTCKNQPKPSLPT
Human	TREX	361	RSF	EEEMEGD	PPADYD	DDRI	IATLKA	VQDSKLQVLVEFTCKNQPKPSLPT
Murine	TREX	420	RIEL	LKLS	STFALI	ITPGDPR	LI	SSGCATRLFEAL
Human	TREX	421	RIEL	LKLS	STFALI	ITPGDPR	LI	SSGCATRLFEAL
Murine	TREX	480	AA	LVPKPRV	TEVHEFL	LRSLSD	SLLAMRQGR	FLMETVFS
Human	TREX	481	AA	LVPKPRV	TEVHEFL	LRSLSD	SLLAMRQGR	FLMETVFS

FIG. 1A-2

Murine	TREX	540	PAAPIREETAAEIPHRSGKAAGTDNNMADNGDLDLGPVETETPPYASPKYLRNFTLTVTDC
Human	TREX	541	PAAPIREETAAEIPHRSGKAAGTDNNMADNGDLDLGPVETETPPYASPKYLRNFTLTVTDF
Murine	TREX	600	YRGMSAPGCFHLFPHTPFDPVLPSEAKFLGSGTGFRPIGGGAGGSGKFEQALGQVQR
Human	TREX	601	YRSMNAPGCFHLFPHTPFDPVLPSEAKFLGSGTGFRPIGGGAGGSGKFEQALGQVPR
Murine	TREX	660	EQFTVVMLTYEREVLMNSLERLNGLPYLANKVVVWNSPKLPSEDLLMPDIGVPIINVVRT
Human	TREX	661	EQFTVVMLTYEREVLMNSLERLNGLPYLANKVVVWNSPKLPSEDLLMPDIGVPIINVVRT
Murine	TREX	720	EKNSLNNRFLPWNEIETEAILSIDDDAHLRHEIDIMFGFVWREARDRIVGFPGRYHAWDI
Human	TREX	721	EKNSLNNRFLPWNEIETEAILSIDDDAHLRHEIDIMFGFVWREARDRIVGFPGRYHAWDI
Murine	TREX	780	PHQSWLYNSYNSCELSMWLTGAAPFKYAYLYSYVMPQAIRDMVDEYINCEDIANNFLV
Human	TREX	781	PHQSWLYNSYNSCELSMWLTGAAPFKYAYLYSYVMPQAIRDMVDEYINCEDIANNFLV
Murine	TREX	840	SHITRKPPIKVTSRWTFRCGCPQALSHDDSHFERHKCINFFVKVGYGMPLLYTQFRVD
Human	TREX	841	SHITRKPPIKVTSRWTFRCGCPQALSHDDSHFERHKCINFFVKVGYGMPLLYTQFRVD
Murine	TREX	900	SVLFKTRFLPHDKTKCFKFI
Human	TREX	901	SVLFKTRFLPHDKTKCFKFI

Isleucine
Zipper

1 414 538 658 919

hTREX

107 141

1 299 418 451 718

hEXT2

1 311 434 476 746

hEXT1

1 251 373 415 676

hEXTL1

1 61 330

hEXTL2

1 317 437 556 814

rib-2

[illegible]

hTRES
hEXT2
hEXT1
hEXTL1
rib-2

hTREX
hEXT2
hEXT1
hEXTL:
rib-2

FIG. 1D

[illegible]

FIG. 1E-1

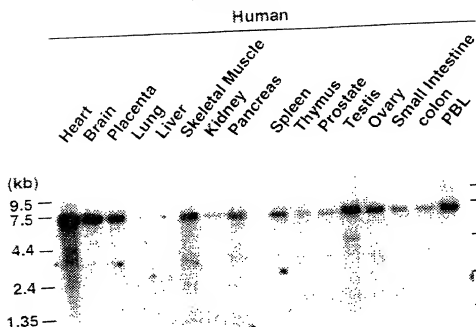


FIG. 1E-2

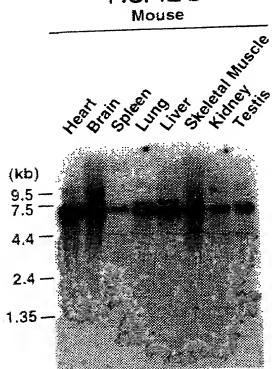


FIG. 1F

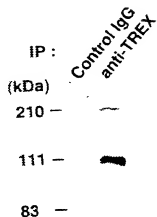


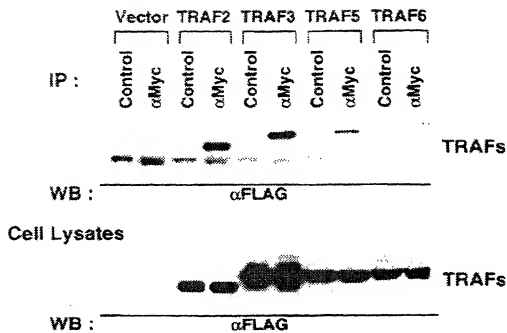
FIG. 2A *In vivo* binding

FIG. 2B

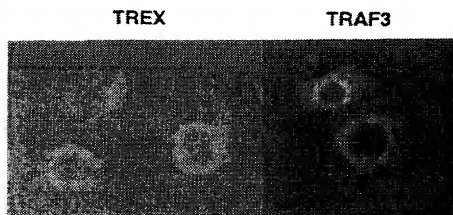


FIG. 3

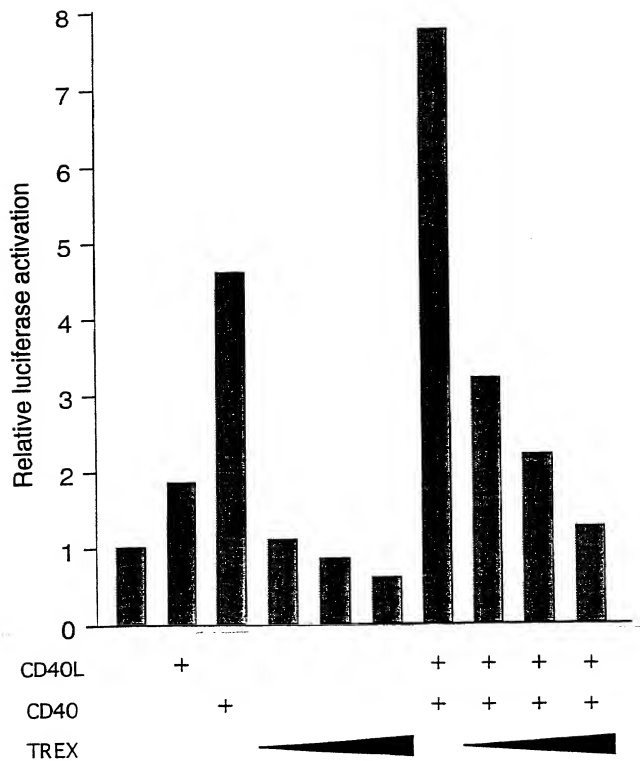
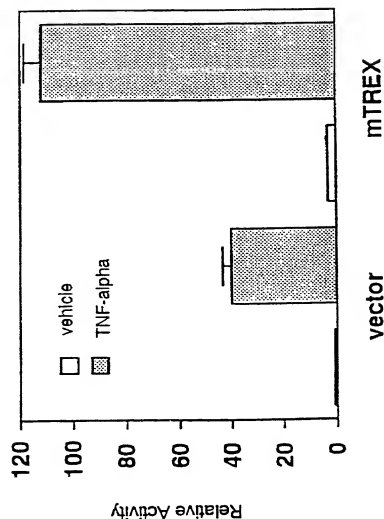


FIG. 4

Effect of mTRES on TNF-alpha-induced
NF-kappaB activation in HEK 293 cells



n=3 980707

FIG. 5B

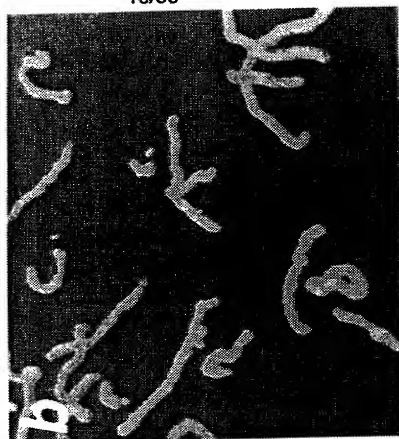


FIG. 5A

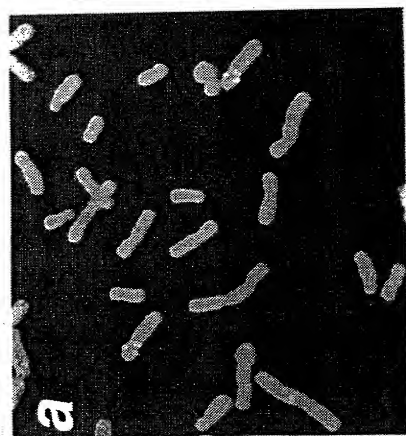


FIG. 6

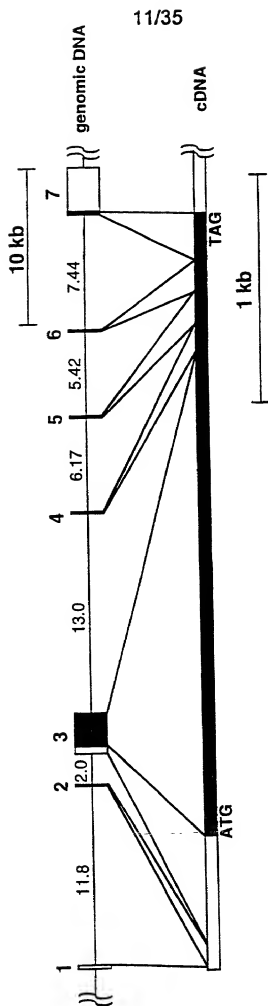


FIG. 7B-1

10	20	30	40	50	60
cctgatcgctggtagtggcagtgaggacggggcctggcatttcagactgccagctgttttt					
70	80	90	100	110	120
accagcccgctgcacatccttgtaatagaagctatgcataattggctggccgacaaagccaagg					
130	140	150	160	170	180
gacaaaagctatggccgttaaaatgggtccctctgagtcagggtcctttccctggctttt					
190	200	210	220	230	240
agcaccatggatctcttccctttcatcccatcagcaatgtggtacctctcttctacttgat					
250	260	270	280	290	300
gatgcacgctgatacttcagattgcctgactaagggttagaaaacctgaatcgctgtgagg					
310	320	330	340	350	360
aagatgaaatttccattttacttggtgccttgtgcaggggacacactgatccctccagaa					
370	380	390	400	410	420
acttgtgtgtgaaaagaggttgcgttttgtgcacagacatcgtgttatggcgagcgatc					
430	440	450	460	470	480
cgacgtgatcagagtgggcaagaggcacagcgaaactatgcacaggctataaccatgttgcg					
M T G Y T M L R					
490	500	510	520	530	540
gaatgggggagtggggaacgggtggtcagacctgtatgcctgcgctgggtccaatcgatccg					
N G G V G N G G Q T C M L R W S N R I R					
550	560	570	580	590	600
gctgacatggcctgagtttcacgctgttcacatcctcctgctcttcttccccctcattgtca					
L T W L S F T L F I I L V F F P L I A H					
610	620	630	640	650	660
ctattacctcaccactctggacgaggcagacgaggctggcgaagcgcatcttctggccctcg					
Y Y L T T L D E A D E A G K R I F G P R					
670	680	690	700	710	720
ggctggcagtgagctctgtgaggtaaagcatgtcctcttgatctctgtcgggattcgtgagtc					
A G S E L C E V K H V L D L C R I R E S					

00000000000000000000000000000000

730	740	750	760	770	780
tgtgagcgaagagctcttcacagctcgaagccaagcggcaggagctgaacacgccagatgtgc					
V S E E L Q L E A K R Q E L N S E I A					
790	800	810	820	830	840
caagctgaacctcaagattgaagcctgtgaagaagagcatagagaatgccaaagcaggagctgc					
K L N L K I E A C K K S I E N A K Q D L					
850	860	870	880	890	900
gctgcagctccaagaatgtcattagccagacagagcactcctacaaggagctgatggccca					
L Q L K N V I S Q T E H S Y K E L M A Q					
910	920	930	940	950	960
gaaccagcccaactgtccctgcccatccgactgctccctgagaaggacgatgccggctc					
N Q P K L S L P I R L L P E K D A G G L					
970	980	990	1000	1010	1020
tccaccccccaaggtcactcgggggttgccgccttcacaactgctttgattactctcgttg					
P P P K V T R G C R L H N C F D Y S R C					
1030	1040	1050	1060	1070	1080
tcctctgacgtctggctttccgctctacgtcttatgacagtgaccagtttgctctttgggag					
P L T S G F P V Y V Y D S D Q F A F G S					
1090	1100	1110	1120	1130	1140
ctacctggaccctttgttgcgaagcaggcttttcaggctacagtgagagccaactgtttatgt					
Y L D P L V K Q A R F Q A T V R A N V Y V					
1150	1160	1170	1180	1190	1200
tacagaaaatgcggccatcgccctgctgtatgtggtttagtggggagaaatgcaagagcc					
T E N A A I A C L Y V V L V G E M Q E P					
1210	1220	1230	1240	1250	1260
cactgtgctgcggccctgcgcacctgaaagcagctgttttctctgccacactggaggac					
T V L R P A D L E K Q L F S L P H W R T					
1270	1280	1290	1300	1310	1320
agatggggcacacaacagctcattatcaacctgtcccggaagtcagacacacagaatctact					
D G H N H V I I N L S R K S D T Q N L L					
1330	1340	1350	1360	1370	1380
gtacaacgtcagtacaggccgcgatgtggcccgagtcaccctctatgctgcccgactacag					
Y N V S T G R H V A Q S T L Y A A Q Y R					
1390	1400	1410	1420	1430	1440
agctggctttgacctggctgctgtaccctctgttcattgtatgtctgaaaccaacttcat					
A G F D L V V S P L V H A M S E P N F M					
1450	1460	1470	1480	1490	1500
ggaaatcccaccgcaggtggccagttgaagcgggaatatctcttcactttccaggcgagaa					
E I P P Q V P V K R K Y L F T F O G E K					

FIG. 7B-3

2230 2240 2250 2260 2270 2280
cctccgcaattttcactctgactgtcacagactgttaccgtggctggaactctgccccggg
L R N F T L T V T D C Y R G W N S A P G

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[illegible]

12290	12300	12310	12320	12330	12340
acgggtccatctttttcccccacacacctgtgatccgtgttgccctctgagggccaatt					
R F H L F P H T P F D P L P S E A K F					
12350	12360	12370	12380	12390	12400
cttggggctcagggactggatttcgggccgatcgggtggcgggggctgggggctctggccaagga					
L G S G T G F R P I G G G A G G S G K E					
12410	12420	12430	12440	12450	12460
gttcaggcgagcgctcggaggcfaatgtccagcgggagcaggttcacagttgtgatgtgtgac					
F Q A A L G G N V Q R E Q F T V V M L T					
12470	12480	12490	12500	12510	12520
ctacgagcgggaggaagtgtctcatggaactccctggagagactcaacggcctccccctacct					
Y E R E E V L M N S L E R L N G L P Y L					
12530	12540	12550	12560	12570	12580
gaacaagctagtggtgtgtggaactctcccaagctgccttcggaggaccttttgtggcc					
N K V V V V W N S P K L P S E D L L W P					
12590	12600	12610	12620	12630	12640
agacattggtgtccccatcatggtcgtccgtactgagaagaacagtttgaacaatcggtt					
D I G V P I M V V R T E K N S L N N R F					
12650	12660	12670	12680	12690	12700
cttgccctggaatgagatgtgagacagagccatactgtccatcgacgatgtctcacct					
L P C W N E I T E A A I L S I D D A H L					
12710	12720	12730	12740	12750	12760
ccgcgatgatgaaatcatgttgggttttgggtgtggagagaagcacgtgatcgcatgtt					
R H D E I M F G F W V W R E A R D R I V					
12770	12780	12790	12800	12810	12820
gggttccctggccggtaccatgcgtgggacatcccgaccagtcctgtgctctacaattc					
G F F G R Y H A W D I P H Q S W L Y N S					
12830	12840	12850	12860	12870	12880
caactactctctgtgagctgtccatggtgtgtgacgggcgctgcctctcttcacaagtatta					
N Y S C E L S M V L T G A A F F H K Y Y					
12890	12900	12910	12920	12930	12940
tgccctacctgtattctttatgtgatgccccaggccatccgggacatggttgagcaggtacat					
A Y L Y S Y V M P Q A I R D M V D E Y I					
12950	12960	12970	12980	12990	13000
caactgtgaggatategcccatgaaactccctgtctccacatcacacggaaaccccccat					
N C E D I A M N F L V S H I T R K P P I					
13010	13020	13030	13040	13050	13060
caaggtgacatcaaggtggacttttcgatgccaggggtgcacctcagggccctgtcccatgat					
K V T S R W T T F R C P G C P O A L S H D					

3010 3020 3030 3040 3050 3060
caaggtgacatcaaggtggacttttcgatgccaggggtgccctcaggccctgtcccatga
K V T S R W T F R C P G C P Q A L S H D

3070	3080	3090	3100	3110	3120
tgactctcattttcacgagcgggcacaagtgtatcaacttttttgtcaagggtgtagcgcta					
D S H F H E R H K C I N F F V K V Y G Y					
3130	3140	3150	3160	3170	3180
tatgcctctctttgtacacacagttcagggtggactcgtgctcttcgaagaccgcctgtcc					
M P L L Y T Q F R V D S V L F K T R L P					
3190	3200	3210	3220	3230	3240
ccatgacaagaccaagtgtctcaagttcacttagggccttgcagttctcgaggagacaattg					
H D K T T K C F K F I *					
3250	3260	3270	3280	3290	3300
agcagagcgagggggagtcacccctcaaggttcccaagggtgtcgaaggctcctggggagcat					
3310	3320	3330	3340	3350	3360
ctgtcgggcaggggccaagacccttctgtgggagaggcagcaggaagagtggaaagggata					
3370	3380	3390	3400	3410	3420
gctgtcttttcattttgaagtcagccactgggcctgggacctctgggtcagagactcaggn					
3430	3440	3450	3460	3470	
cgtctgcacagggcactgactgtagcgcaacactgaggactgttcataagcccgagaca					

FIG. 8A-2

agcccaaac	cagcctgcgc	actgagtggg	cactgtgtgg	agagcggggag	gaccgcttgg
aattgtctgaa	gctctccacc	ttcgccctca	tcattacccc	cggggaccct	cgcttgggta
tttctctctgg	gtgtgcaaca	cggtctctcg	aagccctgga	agtcgggtgcc	gtccccgttg
tgctggggga	gcaggtccag	cttccctacc	aggacatgct	gcagtggaac	gaggcggccc
tggttggtgcc	aaagcctcgt	gttaccgagg	ttcatttcct	gtccagaagc	ctctccgata
gtgacctct	ggctatgagg	cggaagggcc	gctttctctg	ggagacttac	ttctccactg
ctgacagtat	ttttaatacc	gtgctggcta	tgattaggac	tcgcatccag	atccccagccg
ctcccatccg	ggaagaggcg	gcagctgaga	tccccaccg	ttcaggcaag	gcggctggaa
ctgaccccaa	catggctgac	aacggggacc	tggacctggg	gccagtgag	acggagccgc
cctacgcctc	accagatac	ctccgcaatt	tcactctgac	tgtcactgac	ttttaccgca
gctggaactg	tgctccaggg	cctttccatc	ttttcccca	cactcccttt	gacctgtgt
tgccctcaga	ggccaaattc	ttgggctcag	ggactggctt	tcggcctatt	ggtgggtggag
ctggggggttc	tggcaaggaa	tttcaggcag	cgcttggagg	caatgttccc	cgagagcagt
tcacggtggt	gatgttgact	tatgagcggg	aggaagtgt	tatgaactct	ttagagaggc
tgaatggcct	cccttacctg	aacaaggctc	tgggtgtgtg	gaattctccc	aagctgccat
cagaggacct	tctgtggcct	gacattggcg	ttcccatcat	ggttggtccgt	actgagaaga
acagtttgaa	caaccgattc	ttacctgga	atgaaattga	gacagaggcc	atcctgtcca
ttgatgaca	tgctcacctc	cgccatgacg	aaatcatggt	tgggttccgg	gtgtggagag
aagctcggga	ccgcatcgtg	ggcttccctg	gccgttacca	cgcattgggac	atcccccatc
agtcctggct	ctacaactcc	aactactcct	gtgagctgtc	catgggtcgt	acaggtgctg
ctcttttcca	caagtattat	gcctacctgt	attcttatgt	gatgccccag	gccatccggg
acatggtgga	tgaatacatc	aactgtgagg	acattgccat	gaacttctct	gtctccaca
tcactcggaa	gccccccatc	aaggtgacct	cacggtggac	attccgatgc	ccaggatgcc
ctcaggccct	gtctcatgat	gactccacct	tccacgagcg	gcacaagtgc	atcaactctc
tcgtgaagg	gtacggctac	atgcccctcc	gtacacgca	gttcagggtg	gattctgtgc
tcttcaagac	acgcctcccc	catgacaaga	ccaagtgcct	caagttcatc	taggggcagc
gcacggtctg	gggaagagga	tgagcagagg	gaggaagatg	gctcccagg	ttcctaggca
ttgcaggacc	ttgggcacat	ctgctgggtg	gtggcccaga	gcctctgctg	gaaggggcag
caggaggagt	ggaaggaagc	cgctgccttt	atcttgaagt	cagccacact	ggggctggag
ccctggcgct	agtccccggg	gttccccaca	cagggcactg	ctcgatagct	tactactagg
actgtggcga	ctctgcagag	tcactcacac	cgttcgtacg	ccaggacag	ctggttctgt
gtttttacat	tcaataacaa	ctattatgat	tatttaaaaa	gagaaaagtt	cagatttggc
attcaaggct	tatttatata	tatgtgtgtg	tatataaata	catgcacaca	cttgcatata

tataattttt	tggctggggg	agtgtgagtt	tgtcccttct	aaggagggga	ccgcgcaggc
tcctttgttc	tgtattctgg	cggagatggg	tcctggcctt	gtgtcaactg	cttaccttca
aagatcatct	cccatctctc	cagcgcgcatt	tctgtgtcag	caaccagaaa	ggggtgaact
tggccctctt	cggggcctgg	acaagggtctc	tcctctacc	ttctctgtgc	cagtcagcaa
ctctgaactc	acattctctt	cccggtgaat	ccctggagc	gcctgacctt	ggtgggctgt
tcagcttctt	gctgctgggg	ccagcgattt	ttgaggattt	atctttaggc	caggcttgcc
tcctgatcta	tcctctgtct	ccattctctc	ctctgtttga	gagagaaatg	ggaagcaaat
agtgaagaag	aataaggggc	gaagacgcc	ctccagatgt	gctctttcta	tcctcgtctt
ctgttgaaac	acacgctgtc	tgggcctcag	ggctttctga	agtgctctct	ctttgattgtt
ccaggagatc	acagcagctg	ccagcgtgtc	tgttctgaag	tggtttcgag	ctgacgctcc
tctccctagt	gtagagcaag	ccagtgctct	tcgaggaacc	caccgcggctg	gcccgggaagt
tttacaagca	ggcgctgcgc	tgttgataat	tcctttgtga	aattcaacct	ccccccgctt
ctgtctggag	cccatctctg	ttgttatctt	ggtttttgg	ccctaatagt	cagctttggct
gtaggagctc	cgagagttct	gtatgtgtga	gaaacatcgg	aggctctgat	ttgctgtgta
agctcacatc	cacgcttgg	attcaacgta	catctacacg	ccgagttacc	attcttccat
ccctgcttag	gattctgttc	cttgggttga	aactgaaata	agctaatatt	ttgggtcacg
gtggcagtag	gggaacctag	gaggggttga	gtgctatttg	tcagggaatt	agcccatgac
gtgtttcttg	aacctacttt	tcgtgaagtg	gattgacctt	ttggaagttt	ctagacaact
aacaanaagc	caggttttgt	ctgtgtcctg	acatgtccta	agccagttcc	gtcttcccta
gaccttggca	tcttgtgtct	ctatttctgt	gaatacgttc	tcctcttatt	tgctctgacc
acgtgggtcc	tcttcaagta	ctgtttttaa	gctgggcttg	tttgtgtagc	ttccaccac
ctgtagggct	agctcggtct	aagggaacct	tcctccattg	caaacccgag	ccggcccgctg
ccaggactgt	gttttcaaat	gttccccgg	cccaacccca	gcatacgctt	gtagctcccc
tcttagggca	gtgtgggttat	gttccccagc	gtgggggtca	cagccctctt	ctcagaactt
ttctagttgc	ctctacctga	ctctctgatt	gtattcctt	tagcagtagc	cttattccct
cggggagcca	aagagtgttg	tgtgttgccg	catatttggt	ctgtatttc	atctggttct
tttttaattg	aggaaactac	atactgactt	cagtgggaat	cggttagccg	ggggcgctctg
tgtgttggga	ccccctttag	cgggaactag	tgagctgggg	ccgtcttgtt	ggttgagcca
gggcctcttc	cttttagtga	gccaggtgtg	gtggccccga	atgtcaactg	tggaatctaa
aagggtctgag	ttgtctgaca	ccaaaacatg	ccgcaggggg	ggcgttgtgt	ccgggtgctc
caacaaggac	agcctctctt	ccagctgaaa	ggaacactgg	cttgaaggac	tgcacagagg
cttctgaggg	cacgcccctc	tcagcctgag	gcagcaaggt	ggccacagtg	tcactgtgtca
ggtgtctctc	accacagggc	agccgcgcag	ctgtgactgc	cttgagaatg	gaaggccggc
cccacagacc	ggcggtctct	tggctgtctg	gtggcgcccc	cttgccaact	tgtcttgctt
ccgaggtgtc	aggagcgctt	gcttctcttg	tgggcggctg	tgctgtcccg	gtttgggctg
tcttaccata	acacggtccc	aggctctctg	aggccactgt	gagcgtctgc	tctctgggca
gtgctctctc	gtgtgtagct	gtctctcagg	cagggtctac	gagctgggtg	ccctgtccga
aggatgggat	ttttctggga	tgctgcgcgc	acagagttgg	cagctccatg	ttttgtgggg
gaagctttga	qatctatgcc	acgtccatcc	acccccccc	tttttgtcac	gacgacaatg
gtcttacctt	gtatttttgt	aaaaataaaa	aaataaaatg	agaacttaac	tc

[illegible]

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FIG. 8B-2

730 740 750 760 770 780
 tccccgtcatcgcccaactattacctcaccactctggtgatgaggtgatgagggcaggcaagc
 P L I A H Y Y L T T L D E A D E A G K R

790 800 810 820 830 840
 ggatttttgggtccccgggtgggggaacgagctgtgctgaggtgaagcacgtgtgctggatctgt
 I F G P R V G N E L C E V K H V L D L C

850 860 870 880 890 900
 gcgcgcacccgggagtcggtgagtgagagctcctgcagctggagggccaagcgccaagagc
 R I R E S V S E E L L Q L E A K R Q E L

910 920 930 940 950 960
 tgaacagcgagatcgccaagctgaatctgaagatcgaagcctgtgaagaagagcattgaga
 N S E I A K L N L K I E A C K K S I E N

970 980 990 1000 1010 1020
 acgccaagcaggacctgtctccagctcaagaatgtcatcagccagaccgagcattcctcaca
 A K Q D L L Q L K N V I S Q T E H S Y K

1030 1040 1050 1060 1070 1080
 aggagctcatggcccagaaaccagcccaagctgtccctgcccacccgactgctccacagac
 E L M A Q N Q P K L S L P I R L L P E K

1090 1100 1110 1120 1130 1140
 aggagatgcgcggcctcctccctcccccgaaggccactcggggctgcgggtcacacaactgtct
 D D A G L P P P K A T R G C R L H N C F

1150 1160 1170 1180 1190 1200
 ttgattattctcgttgcctctcaccctctggtctcccggtctacgtctatgacagtgcac
 D Y S R C P L T S G F P V Y V Y D S D Q

1210 1220 1230 1240 1250 1260
 agtttgcctttggcagctacctggatcccttgggtcaagcaggcttttcaggcgacagcac
 F V F G S Y L D P L V K Q A F Q A T A R

1270 1280 1290 1300 1310 1320
 gagctcaagctttatgttacagaaaatgcagacatcgctgcctttacgtgtatctagtgg
 A N V Y V T E N A D I A C L Y V I L V G

1330 1340 1350 1360 1370 1380
 gagagatgcaggagcccgctggtgctgctggcctgctgagctggagaagcagttgtattccc
 E M Q E P V V L R P A E L E K Q L Y S L

1390 1400 1410 1420 1430 1440
 tgccacactggcgagcgatggacacacaaccatgtcatcatcaatctgtcacgttaagtcag
 P H W R T D G H N H V I I N L S R K S D

1450 1460 1470 1480 1490 1500
 atacacagaacctctctataacgtcagtaactggccgtgccatggtggcccagtcacact
 T Q N L L Y N V S T G R A M V A Q S T F

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FIG. 8B-3

1510 1520 1530 1540 1550 1560
tctacactgtccaggtacagacctggctttgacttggtcgatatcaccgctggtccatgccca
Y T V Q Y R P G F D L V V S P L V H A M

1570 1580 1590 1600 1610 1620
tgtctcagggcccaacttcattggaaatcccaccacaggtgcccgggtgaagcgggaaatatctct
S E P N F M E I P P Q V P V K R K Y L F

1630 1640 1650 1660 1670 1680
tcaccttcacgggcgagaaagattgagctctctgaggtctagccttcaggaggcccgctcct
T F Q G E K I E S L R S S L Q E A R S F

1690 1700 1710 1720 1730 1740
tcgaagaggaaatggaggcgaccctcccgcgactacgatgaccggatcattgccacccc
E E E M E G D P P A D Y D D R I I A T L

1750 1760 1770 1780 1790 1800
tgaaggcggtgcaggacagcaagctggatcaggtccttggtggaattcacctgcaaaaacc
K A V Q D S K L D Q V L V E F T C K N Q

1810 1820 1830 1840 1850 1860
agcccaaaccccgctgcgactgagtgggcactgtgtggagagcgggaggaccgcttg
P K P S L P T E W A L C G E R E D R L E

1870 1880 1890 1900 1910 1920
aattgtgaaagctctccaccttcgcctcatcattacccccggggaccctcgcttggtta
L L K L S T F A L I I T P G D P R L V I

1930 1940 1950 1960 1970 1980
tttctctgggtgtgcaacacggctcttcgaagccctggaagtcggtgcccgtcccggtgg
S S G C A T R L F E A L E V G A V P V V

1990 2000 2010 2020 2030 2040
tgctggggagcaggtccagcttccctaccaggacatgctgcagtggaagcaggcgccccc
L G E Q V Q L P Y Q D M L Q W N E A A L

2050 2060 2070 2080 2090 2100
tggtggtgcacaaagcctcgtgttacccgaggttcatttctctgcagaagcctctccgata
V V P K P R V T E V H F L L R S L S D S

2110 2120 2130 2140 2150 2160
gtgacctctctggctatgaggcgggcaaggccgctttctctgggagacttacttctccactg
D L L A M R R Q G R F L W E T Y F S T A

2170 2180 2190 2200 2210 2220
ctgacagtatttttaaccgctgctggctatgattaggaactcgatccagatcccgccg
D S I F N T V L A M I R T R I Q I P A A

2230 2240 2250 2260 2270 2280
ctcccatccgggaagaggcggcagctgagatccccaccggttcagggaagggcggtggaa
P I R E E A A A E I P H R S G K A A G T

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FIG. 8B-4

2290 2300 2310 2320 2330 2340
 ctgaccccaacatggctgacaacggggacctggacgtggggccagtggagacggagccgc
 D P N M A D N G D L D L G F V E T E P P

2350 2360 2370 2380 2390 2400
 cctacgcccaccagatacctccgcaatttcaactgtgactgtcactgtactttaccgca
 Y A S P R Y L R N F T L T V T D F Y R S

2410 2420 2430 2440 2450 2460
 gctgggaactgtgctccagggcctttccatcttttcccccacactcccctttgacccgtgtg
 W N C A P G P F H L F P H T P F D P V L

2470 2480 2490 2500 2510 2520
 tgcctccagaggccaaattcctgggctcagggaactggctttccggcctattggtggtggag
 P S E A K F L G S G T G F R P I G G G A

2530 2540 2550 2560 2570 2580
 ctgggggttctggcaaggaatttcaggcagcgcttggaggcaatgttccccgagagcagt
 G G S G K E F Q A A L G G N V P R E Q F

2590 2600 2610 2620 2630 2640
 tcacggtgtgatgttgacttatgagcgggagggaagtgtcttatgaactcttttagagaggc
 T V V M L T Y E R E E V L M N S L E R L

2650 2660 2670 2680 2690 2700
 tgaatggcctcccttacctgaacaaggctcgtggtggtgtggaatttccccaaagctgccat
 N G L P Y L N K V V V V W N S P K L P S

2710 2720 2730 2740 2750 2760
 cagaggaccttctgtggccctgacattggcggttcccatcatgggtccgtactgagaaga
 E D L L W P D I G V P I M V V R T E K N

2770 2780 2790 2800 2810 2820
 acagtttgaaacaaccgattcttaccctgggaatgaaattgagacagaggccatcctgtcca
 S L N N R F L P W N E I E T E A I L S I

2830 2840 2850 2860 2870 2880
 ttgatgacgatgctcaccctccgcatgacgaaatcatgtttgggttccgggtgtggagag
 D D D A H L R H D E I M F G F R V W R E

2890 2900 2910 2920 2930 2940
 aagctcgggacgcgcatcgtgggcttccctggccgttacccacgcgcatgggacatccccatc
 A R D R I V G F P G R Y H A W D I P H Q

2950 2960 2970 2980 2990 3000
 agtctggtctctacaactccaactactcctgtgagctgtccatggtgctgacaggtgctg
 S W L Y N S N Y S C E L S M V L T G A A

3010 3020 3030 3040 3050 3060
 ccttctttcacaaagtattatgcctacctgtattcttatgtgatgccccaggccatccggg
 F F H K Y Y A Y L Y S Y V M P Q A I R D

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FIG. 8B-5

3070 3080 3090 3100 3110 3120
acatgggtggatgaatacatcaactgtgaggacattgccatgaacttccttgtctccaca
M V D E Y I N C E D I A M N F L V S H I

3130 3140 3150 3160 3170 3180
tcactcggaagcccccatcaaggtgacctcacgtggacattccgatgccaggatgcc
T R K P P I K V T S R W T F R C P G C P

3190 3200 3210 3220 3230 3240
ctcaggccctgtctcatgatgactcccacttcacgagcggcacaagtgcatcaactct
Q A L S H D D S H F H E R H K C I N F F

3250 3260 3270 3280 3290 3300
tcgtgaaggtgtacgggtacatgccccctcctgtacacgcagttcaggggtggattctgtgc
V K V Y G Y M P L L Y T Q F R V D S V L

3310 3320 3330 3340 3350 3360
tcttcaagacacgcctgccccatgacaagaccaagtgccttcaagttcatctaggggcagc
F K T R L P H D K T K C F K F I *

3370 3380 3390 3400 3410 3420
gcacgggtctggggaagaggatgagcagagggaggaagatggctcccaaggttccttaggca

3430 3440 3450 3460 3470 3480
ttgcaggaccttgggcacatctgtggtgggtggcccgagacctgtgctggaaggggcag

3490 3500 3510 3520 3530 3540
caggaggagtgggaaggaaaccgctgcctttatcttgaagtcagccacctgggacctggag

3550 3560 3570 3580 3590 3600
ccttggggcggagtcctcccggttccccacacagggcactgactgatagcttacactgagg

3610 3620 3630 3640 3650 3660
actgtggcgactctgcagagtcactcacaccgttcgtacgcccaggacagctgggttcgtg

3670 3680 3690 3700 3710 3720
gtttttacattcaataacaactattatgattatttaaaagagaaagtttcagatttggc

3730 3740 3750 3760 3770 3780
attcaaggcttatttatatatatgtgtgtgtatataaaatcatgcacacacttgcatata

3790 3800 3810 3820 3830 3840
tatatattttggctgggggagtggtgagttttgcctttctaaggaggaggaccgcgcaggc

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FIG. 8B-6

3850 3860 3870 3880 3890 3900
tcctttgttctgtattctggcggagatgggtcctggccttgtgtcactggcttatcctta

3910 3920 3930 3940 3950 3960
aagatcatctcccatcctccccagcgccatctgtgtgcagcaaccagaaagggatgaact

3970 3980 3990 4000 4010 4020
tggccctcttgcgggcctggacaaggctctcttccttaccctttctgttgccagtcagcaa

4030 4040 4050 4060 4070 4080
cctgtaactcacattctcttcccagtgaaatccctgggagcgcctgaccttggtgggctgt

4090 4100 4110 4120 4130 4140
tcagcttctctgctgctggggccagcgatttttgaggatttatcttttagggcaggcttgcc

4150 4160 4170 4180 4190 4200
tccgtacttatccctgctctcccatcttctcttctgtttgagagagaatgaggaagcaaag

4210 4220 4230 4240 4250 4260
agtgaagaaagaaataggggctgaagacgccaactcccagatgggtctttctatcctgctctt

4270 4280 4290 4300 4310 4320
ctgttgaaacacacgtgctgtgggcctcaggcgctttctgaagtgtcttttcttgattgg

4330 4340 4350 4360 4370 4380
acaggagatcagcagcgtgcacatctgctgtggctctgaagtggtttgcaggtcagcctcc

4390 4400 4410 4420 4430 4440
tctccctagtgtgagagcaagccagtgctccttcgaggaacccaccggctggccgggaagt

4450 4460 4470 4480 4490 4500
tttacagcaaggcgctgcttgggataattccttgggtgaaattcaccttccccccgctt

4510 4520 4530 4540 4550 4560
ctgtctggagccccatcctgtgttatctgtgggtttttggaccccctaattgcagcttggtt

4570 4580 4590 4600 4610 4620
gtaggactccccgaggtttgggtatgtgctagaacaatgggaggctgtgatattgctgtgta

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FIG. 8B-6

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FIG. 8B-7

4630 4640 4650 4660 4670 4680
 agctcacatccagccttggaatctaacgggcattcacaccggagttaaccactttccact

 4690 4700 4710 4720 4730 4740
 ccctgcttaggattctgttccctgggctgaaactgaaataagctaatttttgggtcacg

 4750 4760 4770 4780 4790 4800
 gtggcagtaggggaacctaggagggtgtgagtggcatttgtcagggatttagcccatgac

 4810 4820 4830 4840 4850 4860
 gtgtttcttgaaacctactttctggaagtggagttgactctggaagtttctagcaactg

 4870 4880 4890 4900 4910 4920
 aacaaaagctcaggtttgcctgggtcatgcatgccttaagccagttccgtcttcccta

 4930 4940 4950 4960 4970 4980
 gaccttggcatcctgtgcttctatttcttggaatacgttctcctctgacctgcctgtacc

 4990 5000 5010 5020 5030 5040
 acgtgggtcctcttcaagtactgttttgaagctgggctcttttgtgtagctccacccac

 5050 5060 5070 5080 5090 5100
 ctgtagggttagctcggcttaaggggaactctccccattggcaaacgggacccggccgcg

 5110 5120 5130 5140 5150 5160
 ccaggactgtgtttccaaagggttccccgcccccaacccagcatcagcctgtagctcccc

 5170 5180 5190 5200 5210 5220
 tgcctgaggcagtggttatgttcccagcagtggggggtcagacgccccttccctcagaactt

 5230 5240 5250 5260 5270 5280
 tctagtgcctctacctgactcctgacttgatttcttttagcagtagccttcttccct

 5290 5300 5310 5320 5330 5340
 cggggagccaaagagtgtggtgtgtggcgctatatattgtggctgctatttcatctggtttc

 5350 5360 5370 5380 5390 5400
 ttttaatgtgaggaactcacatactgacttcagtgggactcggtagccggggccgtctg

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 FIG. 8B-7
 agctcacatccagccttggaatctaacgggcattcacaccggagttaaccactttccact
 ccctgcttaggattctgttccctgggctgaaactgaaataagctaatttttgggtcacg
 gtggcagtaggggaacctaggagggtgtgagtggcatttgtcagggatttagcccatgac
 gtgtttcttgaaacctactttctggaagtggagttgactctggaagtttctagcaactg
 aacaaaagctcaggtttgcctgggtcatgcatgccttaagccagttccgtcttcccta
 gaccttggcatcctgtgcttctatttcttggaatacgttctcctctgacctgcctgtacc
 acgtgggtcctcttcaagtactgttttgaagctgggctcttttgtgtagctccacccac
 ctgtagggttagctcggcttaaggggaactctccccattggcaaacgggacccggccgcg
 ccaggactgtgtttccaaagggttccccgcccccaacccagcatcagcctgtagctcccc
 tgcctgaggcagtggttatgttcccagcagtggggggtcagacgccccttccctcagaactt
 tctagtgcctctacctgactcctgacttgatttcttttagcagtagccttcttccct
 cggggagccaaagagtgtggtgtgtggcgctatatattgtggctgctatttcatctggtttc
 ttttaatgtgaggaactcacatactgacttcagtgggactcggtagccggggccgtctg

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FIG. 8B-8

5410 5420 5430 5440 5450 5460
tgtggtgggaccccccttagcgggactcagtgagctggggccgtctgtgtggtggagcca

5470 5480 5490 5500 5510 5520
gggcctctcccttagtgaggcaggtgtcgggcccggaatgtcactggtggatctaag

5530 5540 5550 5560 5570 5580
aagggtctgagtggtctgacacccaaaacatgccgcaggagggtgtggtgccggtgcttc

5590 5600 5610 5620 5630 5640
caacaaggacagccctccttgaccctgaaagggaacactggcttgaaggactgcagacagg

5650 5660 5670 5680 5690 5700
ctctgaggggacagccctcctcagcgagaggcagcaaggctggccacagtgtcactgggtca

5710 5720 5730 5740 5750 5760
ggtgctctctaccacgggaaagccgacccgtgtgactcgcttgagatgggaaagcggcg

5770 5780 5790 5800 5810 5820
ccacagaccgggtctccttggtgtctctgtgggcccgcctggccacctgtgctcctggct

5830 5840 5850 5860 5870 5880
cgcaagggtgcaggagcgctcgttctctgggtggccggcttgctgctccggttttgggtg

5890 5900 5910 5920 5930 5940
tcttaccataaacaccgtcccagggtctgcaggccaactgtgagcgctgggtccctgggca

5950 5960 5970 5980 5990 6000
gtgctcctccgtgtggactgtgcctcaggccagggtcaccagctggggctcctgtccgga

6010 6020 6030 6040 6050 6060
aggatgggatctttctgggagctgcgcccggacagagtgggagctcctagtttgtggggg

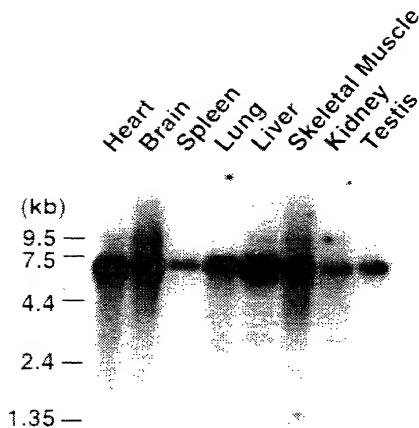
6070 6080 6090 6100 6110 6120
gaagcttggatatccatgccacgtccatccaccccaacccttttcgtcacgagacacaatg

6130 6140 6150 6160 6170
gtcttacattggatttttgtaaaaaaataaaaaataatggagactttaactc

FIG. 9A

Murine	TREX	1	<u>MTGYTMLRNGGAGNGGQTCMLRWSNRIRLTWLSFTLFLILVFFPLIAHYLTTLDEADEA</u>
Human	TREX	1	<u>MTGYTMLRNGGAGNGGQTCMLRWSNRIRLTWLSFTLFLILVFFPLIAHYLTTLDEADEA</u>
Murine	TREX	61	<u>GKRIFGPRVGNELCEVKHVLDLCRIRSVSEELLQLEAKRQELNSEIAKLNKITEACKKS</u>
Human	TREX	61	<u>GKRIFGPRVGNELCEVKHVLDLCRIRSVSEELLQLEAKRQELNSEIAKLNKITEACKKS</u>
Murine	TREX	121	<u>IENAKQDLLQLNKVIISQTEHSYKELMAQNQPKLSLPIRLLEKDDAGLPPPKATRGCR LH</u>
Human	TREX	121	<u>IENAKQDLLQLNKVIISQTEHSYKELMAQNQPKLSLPIRLLEKDDAGLPPPKATRGCR LH</u>
Murine	TREX	181	<u>NCFDYSRCPLTSGFPVYVYDSDFAFGSYLDPLVKQAFQATVRANVYVTENNAIACLYVY</u>
Human	TREX	181	<u>NCFDYSRCPLTSGFPVYVYDSDFAFGSYLDPLVKQAFQATVRANVYVTENNAIACLYVY</u>
Murine	TREX	241	<u>LVGEMQEPVTLRPADLEKQLFSLPHWRTDGHNHVTIINLSRKS DTONLLYNVSTGRH-VAQ</u>
Human	TREX	241	<u>LVGEMQEPVTLRPADLEKQLFSLPHWRTDGHNHVTIINLSRKS DTONLLYNVSTGRH-VAQ</u>
Murine	TREX	300	<u>STLFAADYRAGFDLVVSPLVHAMSEPNFHEIPQVVPVKRYLFTFQGEKIESLRSSLOEA</u>
Human	TREX	301	<u>STLFTVDYRPFGLDLVSPLVHAMSEPNFHEIPQVVPVKRYLFTFQGEKIESLRSSLOEA</u>
Murine	TREX	360	<u>RSFEEHEMGDPPADYDDRIITLKAQVDSKLDQVLVEFTCKNQPKSLPTEWALCGERED</u>
Human	TREX	361	<u>RSFEEHEMGDPPADYDDRIITLKAQVDSKLDQVLVEFTCKNQPKSLPTEWALCGERED</u>
Murine	TREX	420	<u>RLELLKLSTFALIITPGDPRLLISSGCATRLFEALEVGAVPVVLGEOVQLPYHMDLQWNE</u>
Human	TREX	421	<u>RLELLKLSTFALIITPGDPRLLISSGCATRLFEALEVGAVPVVLGEOVQLPYQDMLQWNE</u>
Murine	TREX	480	<u>AALVVPKPRVTEVHFLRLSLSDSDLLAMRRQGRFLWETYFTADSI FNTVLAMIRTRI QI</u>
Human	TREX	481	<u>AALVVPKPRVTEVHFLRLSLSDSDLLAMRRQGRFLWETYFTADSI FNTVLAMIRTRI QI</u>
Murine	TREX	540	<u>PAAPIREEAAAEIPHRSGKAAGTDPNMADNGDLDLGPVETEPPIYASPKYLRNFTLVTDC</u>
Human	TREX	541	<u>PAAPIREEAAAEIPHRSGKAAGTDPNMADNGDLDLGPVETEPPIYASPKYLRNFTLVTDF</u>
Murine	TREX	600	<u>YRGWNSAFGRFHLFPHTFPDPVLPSEAKFLGSGTGFRPIGGGAGGSGKEFQAALGGNVQR</u>
Human	TREX	601	<u>YRSWNCAPGPFHLFPHTFPDPVLPSEAKFLGSGTGFRPIGGGAGGSGKEFQAALGGNVPR</u>
Murine	TREX	660	<u>EQFTVVHLTYEREVEVLHNSLERLNGLPYLNVVVVWNSPKLPSEDLLWPDIGVPIHVVRT</u>
Human	TREX	661	<u>EQFTVVHLTYEREVEVLHNSLERLNGLPYLNVVVVWNSPKLPSEDLLWPDIGVPIHVVRT</u>
Murine	TREX	720	<u>EKNSLNNRFLPWNEIETEAILSIDDAHLRHDEIMFGFVWREARDRIVGPPGRYHAWDI</u>
Human	TREX	721	<u>EKNSLNNRFLPWNEIETEAILSIDDAHLRHDEIMFGFVWREARDRIVGPPGRYHAWDI</u>
Murine	TREX	780	<u>PHQSWLYNSNYSCELSMVLTGAAFFHKYAYLYSYVMPQAIRDMVDEYINCEDIAHNFV</u>
Human	TREX	781	<u>PHQSWLYNSNYSCELSMVLTGAAFFHKYAYLYSYVMPQAIRDMVDEYINCEDIAHNFV</u>
Murine	TREX	840	<u>SHITRKPPKIKVTSRWTFRCPCGCPQALSHDDSHFHERHKCINFFVKVYGYMPLLYTQFRVD</u>
Human	TREX	841	<u>SHITRKPPKIKVTSRWTFRCPCGCPQALSHDDSHFHERHKCINFFVKVYGYMPLLYTQFRVD</u>
Murine	TREX	900	<u>SVLFKTRLPHDKTKCFKI</u>
Human	TREX	901	<u>SVLFKTRLPHDKTKCFKI</u>

FIG. 9B



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FIG. 10A

empty	+	+	-	-	+	+	+	+
EXTL3	-	-	+	+	-	-	-	-
TNF- α	-	+	-	-	+	+	+	+
competitor	-	-	-	-	+	-	-	-
control Ab	-	-	-	-	-	+	-	-
anti p50 Ab	-	-	-	-	-	-	+	-
anti p65 Ab	-	-	-	-	-	-	-	+

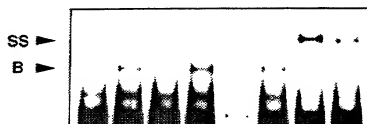


FIG. 10B

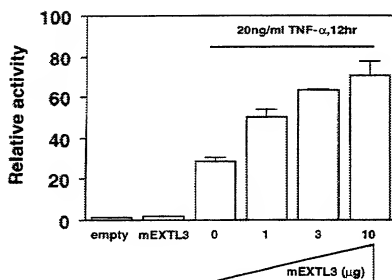


FIG. 10C

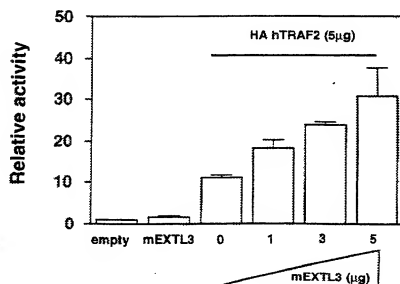


FIG. 11A

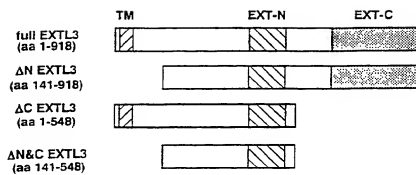


FIG. 11B

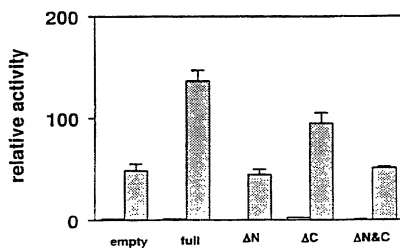


FIG. 11C

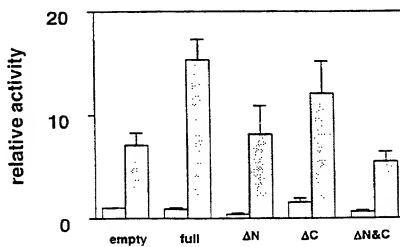


FIG. 11D-a

FIG. 11D-b

FIG. 11D-c

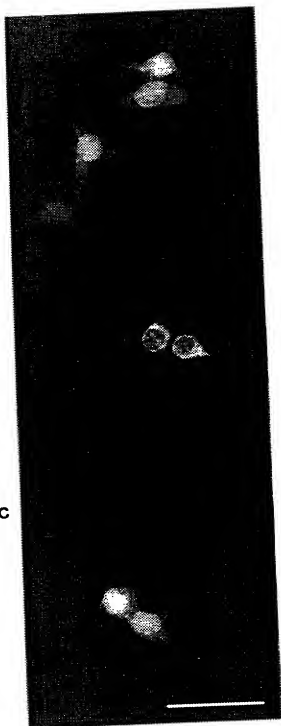


FIG. 12A

FIG. 12E

FIG. 12B

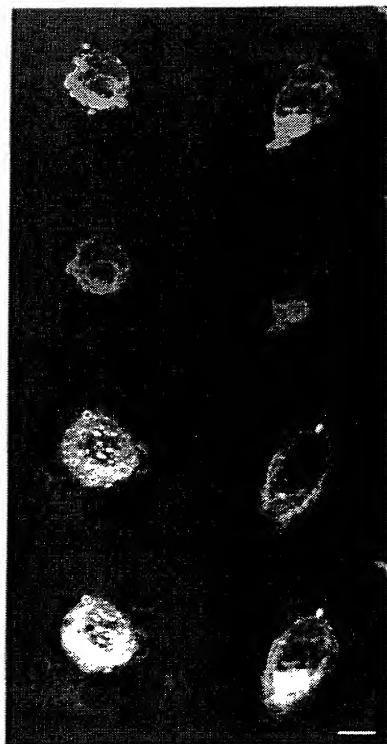
FIG. 12F

FIG. 12C

FIG. 12G

FIG. 12D

FIG. 12H



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